

May 29, 2007

Mail Stop 6010

Dov Ofer, Chief Executive Officer  
Lumenis Limited  
P.O. Box 240  
Yokneam 20692  
ISRAEL

**Re: Lumenis Limited**  
**Registration Statement on Form 20-F**  
**Filed May 1, 2007**  
**File No. 0-27572**

Dear Mr. Ofer:

We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Item 3. Key Information, page 4

A. Selected Financial Data, page 4

1. We noted your statements that the amounts reported for fiscal years 2002 and 2003 should not be relied upon and that 2002 amounts have not been restated even though you indicate you determined your revenue recognition with respect to certain transactions in 2002 and 2003 was inappropriate. In addition, we see that you made “necessary adjustments” to your fiscal 2003 amounts and balances presented herein that have not been audited. Please respond to the following:
  - Please tell us why you believe it is appropriate to include “unreliable” selected financial information for fiscal 2002 herein.
  - With regards to fiscal 2003 never being audited, please have your auditors tell us how they were able to gain comfort that the January 1, 2004 balance sheet account balances were not materially misstated for purposes of opining on your fiscal 2006, 2005 and 2004 financial statements.
  - Please remove the label “Audited” with regards to 2006, 2005 and 2004 on the table of selected financial results as selected financial data is *derived* from either audited or unaudited financial statements but not audited.

Revise the filing as necessary based on our comment.

B. Capitalization and Indebtedness, page 5

2. We see you have included financial information as of February 28, 2007 herein. Please confirm you have complied with the requirements of Item 8.A.5. of Form 20-F which indicates “If, at the date of the document, the company has published interim financial information that covers a more current period than those otherwise required by this standard, the more current interim financial information must be included in the document.” Revise the filing as necessary based on our comment.

Item 4. Information on the Company, page 22

A. History and Development of the Company, page 22

Private Placement of Ordinary Shares and Warrants to the Investors, page 25

3. We note disclosures herein that pursuant to a Registration Rights Agreement, the Company has agreed to provide certain registration rights to the Investors as well as to the Bank. Please tell us and revise the filing to disclose how you have

accounted for the Registration Rights Agreement. Please make sure to address the impact of adopting "FASB Staff Position No. EITF 00-19-2" on your financial statements in your response and in the filing.

B. Business Overview, page 33

Breakdown of Net Sales By Activity and Geographic Market, page 42

4. We noted your statement that "as is common in this industry, a substantial portion of [your] sales are completed in the last few weeks of each calendar quarter." Please tell us more about the timing of your sales and why you believe your current internal controls enable you to record sales transactions in the proper period.

Item 5. Operating and Financial Review and Prospects, page 53

A. Operating Results, page 53

Year Ended December 31, 2006 Compared With Year Ended December 31, 2005, page 56

5. Where changes in financial statement line items are the result of several factors, each significant factor should be separately quantified and discussed. For example, you say that general and administrative expenses increased 22% "due primarily to higher audit fees, IT service fees and a provision for the settlement of the GSI claim." However, you do not quantify the impact of each of these factors. Revise your filing accordingly to address our concerns.

Legal Proceedings, page 80

General

6. We note from page 84 that you are under review for "certain unlicensed exports or reexports to Iran of devices and associated spare parts." We also note that the 20-FR does not contain any other information relating to operations or contacts associated with Iran, which is identified as a state sponsor of terrorism by the U.S. State Department and subject to U.S. export controls and sanctions. Please describe for us your contacts with Iran and discuss their materiality to you in light of the country's status as a state sponsor of terrorism. Please also discuss whether the contacts constitute a material investment risk to your security holders. Your

response should describe your current, past and anticipated operations in and contacts with Iran, including through affiliates and other direct and indirect arrangements.

7. Your materiality analysis should address materiality in quantitative terms, including the approximate dollar amount of your revenues, assets and liabilities, if any, associated with Iran. Please also address materiality in terms of qualitative factors that a reasonable investor would deem important in making an investment decision, including the potential impact of corporate activities upon a company's reputation and share value.

We note, for example, that Arizona and Louisiana have adopted legislation requiring their state retirement systems to prepare reports regarding state pension fund assets invested in, and/or permitting divestment of state pension fund assets from, companies that do business with countries identified as state sponsors of terrorism. The Missouri Investment Trust has established an equity fund for the investment of certain state-held monies that screens out stocks of companies that do business with U.S.-designated state sponsors of terrorism. We note also that Vermont's Pension Investment Committee has adopted a resolution restricting investments in companies and governments linked to terrorist activities. Your materiality analysis should address the potential impact of the investor sentiment evidenced by such actions concerning companies with operations associated with Iran.

8. Your qualitative materiality analysis also should address whether the government of Iran or entities controlled by it receive cash or act as intermediaries in connection with your operations or, to the best of your knowledge, those of your affiliates.
9. We note that you have operations in several countries in the Middle East and Africa. Please identify for us the countries in the Middle East and Africa in which you have operations.

Financial Statements, page F-1

Report of Independent Registered Public Accounting Firm, page F-2

10. We see your auditors' indicate herein they did not audit the financial statements of certain of your subsidiaries but the financial statements of those subsidiaries were audited by another auditor, whose reports have been furnished to them. If an audit report required to be filed includes reference to another accountant's report,

the separate report of the other accountant must also be included in the filing.  
Accordingly, please revise the filing to include the referenced auditors' report.

Consolidated Statements of Operations, page F-4

11. Please tell us about the nature of the "special charges" included on your consolidated statements of operations, including what specifically comprises the reported amounts and why you believe it is appropriate to identify such amounts as special charges (rather than selling and marketing or general and administrative expense) on the face of your income statement. In addition, we noted from your discussion under Item 5, that it appears a number of charges of a different nature are accumulated in this one line. Please also tell us why you believe this is appropriate and cite the accounting guidance upon which you based your current accounting and presentation. Revise the filing as necessary based on our concern.

Consolidated Statements of Cash Flows, page F-5

12. We noted your discussion on page F-27 whereby you state, "while the Company did engage in hedging activities in 2004 and prior, it did not do so in 2005 or 2006." These and other disclosures in Note 14 imply you did not have any derivatives outstanding during 2006. Accordingly, please tell us why the cash flow statement includes a line item to account for changes in the fair value of derivatives for *all periods* presented. Please revise your disclosures in the filing as necessary to address our concerns.

Note 2 – Recapitalization, page F-7

13. We noted that as part of the recapitalization in December 2006 you issued options to certain former directors. It appears that these individuals would no longer be considered employees of the company in this case. Please tell us how you accounted for this issuance of options and cite the accounting guidance upon which you based your accounting.
14. We see disclosures on page 26 that the Purchase Agreement provides that the amount of "purchased shares" will be adjusted. Please tell us how you have accounted or will account for any "adjustments" to the "purchased shares" and support your planned or actual accounting with references to applicable authoritative accounting literature. Revise the filing as necessary based on our comment.

15. We see disclosures on page 32 that your 2006 debt restructurings resulted in actual and contingent write off's of outstanding loan balances. Please tell us how you accounted for the write off's and support your assertions with references to applicable authoritative accounting literature. Revise the filing as necessary based on our comment.

Note 3 – Financial Statement Presentation & Significant Accounting Policies, page F-7

16. We see that on pages 54 and F-9 you refer to using a valuation of an independent third party when determining fair value of your reporting units. Please revise the filing to comply with Item 10.G. of Form 20-F which indicates “where a statement or report attributed to a person as an expert is included in the document, provide such person’s name, address and qualifications and a statement to the effect that such statement or report is included, in the form and context in which it is included, with the consent of that person, who has authorized the contents of that part of the document.”

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As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the

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filing;

- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Julie Sherman at (202) 551-3640 Jay Webb, at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Alan Morris at (202) 551-3601 or me at (202) 551-3617 with any other questions.

Sincerely,

Russell Mancuso  
Branch Chief

Cc. Michael Hein (Greenberg Traurig)  
VIA FACSIMILE (602) 445-8725